

# SeedBytes

A quarterly newsletter produced for the New Brunswick Seed Potato Industry

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## 2009 Potatoes NB Potato Conference and Tradeshow

By Robert Gareau—Potatoes NB Executive Director



The 2009 Potato Conference and Trade Show will be held on February 3 and 4 at the Eagles Nest in Woodstock, NB.

This key annual event has become the biggest and best gathering of NB potato growers and interested stakeholders. Our annual Potato Conference and Trade Show is a two day affair which attracts over 200 people per day.

A full slate of potato industry representatives offer display booths and attend the trade show to give the industry the opportunity to find out what's new and get caught up with all the recent technologies and resources available in the potato world.

Presentations at this year's event will cover a wide range of topics that are of interest to seed, table and processing potato growers.

The core of our conference is focused on topics of interest to New Brunswick potato farmers. Our program features a wide range of interesting topics, presented by local and guest potato industry scientists and other experts.



The following are a few confirmed speakers at this year's conference:

Speaker	Affiliation	Topic
Dr. Joe Sowokinos	CMM Consulting, Grand Forks, ND	What tools does a storage manager have to regulate sugar content in stored potatoes?
Jerome Damboise	ESWCC, Saint André, NB	Compensating farms for services provided to society
André Gagnon	Progest2001 inc., QC	National PCN research project
Dr. Rob Davidson	Colorado Certification Agency	PVY situation in the Pacific Northwest of the United States
Dr. Gary Grant	Nova Scotia Agricultural College	The Credit Crunch and the Potato Industry
Ray Keenan	United Potato Growers of Canada	Initiatives update undertaken by the United Potato Growers of Canada
Greg Maheras	J. Maheras—Boston	Marketing opportunities within the United States table potato market
Bob Fraser	Gardner Pinfold, Halifax, NS	Benchmarking Study for Canadian Potatoes
Cedric MacLeod	MacLeod Agronomics	Energy Efficiency in the New Brunswick Potato Industry

These are just a few of the over 25 speakers that will present at the conference this year. For more information on the conference, please contact the Potatoes NB office at (506) 473-3036 or ctpotato@potatoesnb.com

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### Upcoming Events:

Potatoes NB Annual Conference and Tradeshow — Tuesday, February 3rd and Wednesday, February 4th, 2008 at the Eagles Nest in Woodstock. For further information, please contact the Potatoes NB office at (506) 473-3036 or ctpotato@potatoesnb.com

Northeast Potato Technology Forum will be held in mid-March, 2009 in Bangor ME. For more information contact Dr. Wayne Honeycutt — wayne.honeycutt@ars.usda.gov

Electronic versions of all SeedBytes issues can be found online at [www.gnb.ca](http://www.gnb.ca), then click language preference, Departments and Agencies/Agriculture and Aquaculture/ Potatoes/SeedBytes and select the month for the issue.

The newsletter link has been emailed to all recipients. If you do not have the link, contact Andrew Sullivan at [andrew.sullivan@gnb.ca](mailto:andrew.sullivan@gnb.ca) or 1-866-778-3762.

The following are excerpts from current research projects related to seed potato production in the province.

### Dr. Khalil Al-Mughrabi—DAA Potato Pathologist

- **Management of silver scurf and Fusarium dry rot of potatoes in storage using Bio-Save 10LP and Bio-Save 11LP (*Pseudomonas syringae*).** Results indicated that the use of Bio-Save (10LP or 11LP) or Mertect alone or the combination of both appears to be a potentially sound strategy that can be used in the management of both *H. solani* and *F. sambucinum* and in the resistance management of both products. This trial will be repeated for a second time towards the end of this year.
- **Efficacy of various fungicide treatments against pink rot and early blight of potatoes.** The fungicides Bravo, Revus, Inspire and Quadris reduced the severity of early blight on potato leaves. Similarly, Ridomil Gold 480SL in combination with either Confine or Revus and the combination of Revus and Confine reduced the severity of pink rot.
- **Management of common scab of potato using biopesticides, soil additives and fumigants.** Chloropicrin, Pic-Plus, fludioxonil, *E. cloacae*, manganese sulfate and mustard meal were effective in varying degrees in suppressing common scab in potatoes.
- **Efficacy of Confine applied as a post-harvest treatment against pink rot and late blight.** This study will be conducted in storage this winter. The incidence and severity of late blight and pink rot will be assessed at 4 and 8 months after storage. The processing quality of the tubers will also be assessed during the course of the study.
- **Efficacy of plant essential oils and their components (S-carvone, peppermint oil, L-menthone and spearmint oil) in suppressing late blight and pink rot will be studied in storage this winter.**

### Janet McLaughlin —DAA Technician—Potato

#### Innovative Entrepreneurship via Cultivar Adaptation

This trial has been conducted over the past several years by Jacques Lavoie (project leader), Janet McLaughlin and David Adams in joint collaboration with Potatoes New Brunswick. The trial provides growers with three consecutive years' data on new varie-

ties and clones. Its aim is to aid growers with variety selection to fit their markets. Variety types include: Russets, Chips, Round Whites, Reds and Yellow flesh. This past season saw over 100 varieties placed in field trials for evaluation. An asset this year was the ability to access varieties from the North East Variety 1031 and the Potato Variety Management Institute (PVMI) Programs. This partnership allows access to varieties and clones not yet available to individual growers, and enables us to share and compare individual variety data. From this data, growers will have a package of variety information and have the ability to determine if the variety is suitable to New Brunswick conditions.

The trial findings for the 2008 growing season will be made available at the 2009 Potato Conference on February 3<sup>rd</sup> and 4<sup>th</sup>, 2009.

### Dr. Loretta Mikitzel —DAA Potato Physiologist

#### Potato Development Centre Screenhouse Research 2008

Seed potato research trials in the screenhouse at the Potato Development Centre, Wicklow aim to maximize plant productivity and economic return to the grower. In one study, we compared the performance of intact plantlets and single node cuttings dipped in rooting hormone. The average plantlet can be cut into 5 - 6 nodes. By using single node cuttings, fewer plantlets are required to plant a given area.

Cutting survival was cultivar dependent. Survival of Kennebec, Red LaSoda and Yukon Gold cuttings was greater than 80%, and less than 80% with Snowden and Goldrush.

Preliminary yield data suggest single node cuttings can be as productive as whole plantlets. Weight of useable minitubers produced by the single node cuttings and intact plantlets was the same, regardless of cultivar. Compared with whole plantlets, single node cuttings tended to produce fewer minitubers. For example, each Red LaSoda plantlet produced 1.8 minitubers, while each cutting produced 1.1 minitubers. Single node cuttings also produced larger minitubers. Minitubers from cuttings were up to 14 grams larger than minitubers from plantlets.

In 2009, planting density of cuttings will be studied, along with survival and performance of basal nodes versus apical plantlet pieces.

# The Potato Association of America to Meet in Fredericton –2009

By Dr. Loretta Mikitzel — Potato Development Specialist—Physiology



The Potato Association of America (PAA) was formed in 1913 and is an international society made up of university research and extension staff, industry personnel and potato growers. The major objective of PAA is to collect and disseminate the best available technical and practical information relating to all aspects of potato production, biology, and utilization. PAA serves as the official professional society for those involved in potato research, extension, production, and utilization. For additional information visit the [PAA website](#).

PAA meets annually at selected sites throughout North America. Key activities of the annual meeting are research presentations, information exchange, identification of professional contacts, and field and industry tours.

The 93rd Annual Meeting of The Potato Association of America will be held August 9-13, 2009 in Fredericton, NB at the Delta Fredericton Hotel.

The meeting begins on Sunday at the President's evening reception. The delegate program will kick off on Monday morning with the "Alternative Methods of Pest and Disease Control" Symposium. An International PVY Symposium is also planned. Approximately 100 oral and poster presentations will be scheduled throughout the week. A day-long agricultural tour will visit a wholesale agricultural operation with 10+ acres of horticultural greenhouses, a museum dedicated to the potato, field research and cultivar trials, and a brand new kettle chip facility. A research tour will include three Fredericton-based facilities: Agriculture and Agri-Food Canada Potato Research Centre, New Brunswick Plant Propagation Centre and the grower-operated Agricultural



Certification Services. Social events will highlight Maritime hospitality and delicacies. Accompanying persons tours feature an historical settlement with costumed residents, botanical gardens, artisan shops, the world's highest tides at Fundy National Park.

A block of rooms has been reserved at the Delta Fredericton Hotel at \$149.00 (Cdn) per night. I hope you will join us in Fredericton August 9-13, 2009 for an informative and fun PAA meeting.

For additional information visit the PAA 2009 Website: [www.paa2009.org](http://www.paa2009.org).

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Chair, Local Arrangements Committee  
Secretary—PAA

# Maine and New Brunswick Potato Industries working together

By Dave Wattie — Potato Development Specialist—Integrated Pest Management



## Joint Potato Late Blight Management Strategy

Due to potato late blight, growers in Maine and New Brunswick suffered significant crop losses in 2008. This largely preventable disease is a recurrent problem which impacts growers both in crop losses and increased management costs. The Potato Industries of Maine and New Brunswick need to implement a comprehensive late blight management program to prevent this disease from becoming a major issue for the region in the future.

A wide-ranging effort undertaken by the potato industries in both regions can prevent future major potato late blight epidemics. An effective program will only be successful if all growers and industry personnel work together to eliminate this disease.

IMMPAcT (International Maine-Maritime Potato Action Team) was organized during the winter of 2004/05 in response to concerns over late blight management for future potato crops. Late blight is recognized as a 'community' plant disease, whereby production practices and choices implemented by each individual producer will affect everyone in the region. Since this plant disease knows no boundaries, IMMPAcT has gathered stakeholders from our international farming community to collaborate in the promotion and adoption of best management practices for potato plant health.

A document, now available on the IMMPAcT website, outlines a late blight management program recommended for implementation throughout the Maine-

New Brunswick potato production region. Using the HACCP approach, there are 14 points that outline critical control points available to and adoptable by each and every producer.

For more information on this IMMPAcT initiative, please visit their website:

[www.potatoimpact.com](http://www.potatoimpact.com)



### Changing consumer tastes explored at upcoming World Potato Congress

(article originally appeared on [www.potatonews.com](http://www.potatonews.com))

Changing consumer tastes and a greater focus on 'healthy' food has had an impact on the western world's eating habits. The implications for the potato industry will be explored at the upcoming World Potato Congress to be held in New Zealand next March. Lauraine Jacobs, world renowned food writer and editor of Cuisine magazine, will address the Congress on changing consumer tastes and what this means for the potato. Terry Olsen, grower and the Chair of the 7th World Potato Congress Organising Committee, says Lauraine will provide an important perspective to the Congress – what the consumer thinks.

"Consumer tastes are constantly changing, and for a sector like ours, it's vital we understand what consumers think and feel about our product. "Lauraine knows the consumer inside out. Expect her to pick trends and issues that we need to prepare for if we are to grow potato consumption."

The 7th World Potato Congress, to be held in New Zealand 22-25 March 2009, is being hosted by Potatoes New Zealand, the organisation representing the country's 300 potato growers.

With the theme "Nourishing Our Future," the Congress will review the latest world developments in crop management, environment and energy issues, food and non-food processing, consumer trends and food safety and quality.



### New web site dedicated to the Colorado potato beetle

(article originally appeared on [www.potatonews.com](http://www.potatonews.com))

Dr. Andrei Alyokhin, Associate Professor of Applied Entomology at the University of Maine, recently launched a web site dedicated to the Colorado potato beetle at [www.potato beetle.org](http://www.potato beetle.org). Alyokihin has been working with the Colorado potato beetle since he first entered the graduate program at the University of Massachusetts in 1994. This site includes information on beetle biology, pest status, history, management options, insecticide resistance, as well as a searchable bibliography containing over 700 peer-reviewed English-language publications. According to Prof Alyokhin: "I view this website as a tribute of sorts to this in many regards outstanding organism. Over the years, I could not help developing a somewhat grudging respect for the Colorado potato beetle. Humans, with our supposedly superior intelligence, have been trying to defeat this small and rather dumb animal for over 150 years. The weapons ranged from deadly chemicals to plagues of disease and parasites, and from flame throwers to genetically engineered chimeras. Yet, our ten-striped nemesis still represents a major threat to solanaceous crops."



### AAFC's Accelerated Release of Potato Selections 2009

Agnes Murphy—AAFC Potato Research Centre

An Open House to showcase the Accelerated Release (AR) 2009 series of selections developed by Agriculture and Agri-Food Canada will be held at the Potato Research Centre, Lincoln Road, Fredericton on Wednesday, February 18, 2009.

The AR2009's consist of the most promising selections identified from regional Adaptation Trials in 2008. This is determined by reviewing the results from the 2008 trials in conjunction with data collected over three years of evaluation at the AAFC Benton Ridge Substation. In NB, the 2008 trials were conducted in a production field at Bloomfield and were on display at the Growers' Field Day hosted by Potatoes NB and NBDAA on August 26.

These selections have characteristics that indicate potential in several markets and are offered to industry for evaluation. For a fee of \$100 per selection, interested parties will receive 10 kg of Breeders Seed to evaluate according to their own criteria on a non-exclusive basis. (Seed supplies are limited and are awarded on a first-come first-served basis). Next year, a 20 kg sample will be supplied to those that wish to conduct a second year of non-exclusive testing on the AR2009 series. After completion of non-exclusive testing, the selections will be awarded for exclusive evaluation to participants based on the results from cash bids. Licensing agreements follow for those selections that are deemed to have commercial potential.

In 2009, the AR2007 series will be awarded exclusively following the cash bidding process that closes on March 6, 2009.

Full details of the Accelerated Release program and application forms will be found at the AAFC web site at [www.agr.gc.ca/potato-cultivars](http://www.agr.gc.ca/potato-cultivars). This site will also contain descriptions and photos of the AR2009 selections along with summarized yield and quality data when they are completed in late January. Participants in the AR program are encouraged to provide feedback and observations on performance directly to the breeding program. This will assist breeders track the performance of parents and identify selections best suited to potato production.

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SeedBytes is produced through a collaborative effort by Potato Development Centre staff.

Special thanks to Dr. Loretta Mikitzel for ongoing editing of this newsletter.

If you have ideas for future issues, please forward them to any Potato Development Centre staff member.